FROM: m

Serial Number 09/683.584 Filed January 22, 2002 Group Art Unit: 1725

## REMARKS

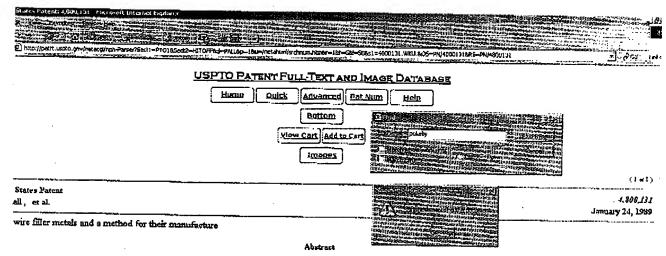
Claim 1-23 are pending in the application. Claims 1-2, 8, and 12 are amended. Claims 1-7 and 17-23 were rejected under 35 USC 103(a) over U.S Patent No. 4,463,243 ("Church") in view of U.S. Patent No. 4,800,131 to Marshall et al. ("Marshall"). Applicant respectfully asserts that the Patent Office has not met its burden of establishing a prima facie case of obviousness and there the rejection is improper.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations1.

Upon examination of each of the three legal requirements of the prima facie case of obviousness in view of the Patent Office's rejection of Claims 1-7 and 17-23, Applicant asserts that the Patent Office has satisfied none of the three requirements. With regard to the final requirement that a reference or a combination of references must teach or suggest all the claim limitations, it is respectfully argued that neither Church nor Marshall nor their combination discloses or even suggests the present invention as claimed in independent Claims 1 and 17. Applicant's attorney has carefully reviewed both patents, but could not find a teaching of a wire electrode comprising a combination of graphite and compounds of potassium, wherein that combination of graphite and potassium in the core composition does not exceed 5%wt, as claimed in independent Claim 1. Church doesn't mention anything about the composition of a wire. While Marshall talks about cored wire filler metals, it mentions a potassium titanate compound only once (Col. 2, line 19), never mentioning or suggesting that a combination of graphite and compounds of potassium should be used for stabilizing the arc in a straight polarity welding configuration, and never mentioning or suggesting any percentage of the combination in the core composition, contrary to the invention claimed in independent Claim 1. The word "polarity" could not be found in Marshall even a single time, as follows from a screen shot of the search performed by the undersigned attorney. The word "DCEN" could not be found in Marshall either. A "combination" was mentioned in Marshall once (Col. 2, line 11) in reference

Serial Number 09/683,584 Filed January 22, 2002 Group Art Unit: 1725

to a combination of various types of wires, not to a composition of the core elements or compounds.



t soldering and brazing and wire filter metals having a metalic theath cooldoning a core wire and, preferably, filler powder materials. The chameter of the composite wire is reduced by drawing, rolling its composite wire is easier for filler metal manufacturers to make and can have better operating characteristics leading to improved bead appearance and joint quality

December 20, 1984

Therefore, none of the cited patents, alone or combined, teach or suggest all the limitations of independent Claim 1. The Patent Office has not met its burden of establishing a prima facie case of obviousness with respect to Claim 1.

Similarly, none of the cited patents alone or combined teach or suggest a straight polarity welding process with a step of feeding a wire electrode comprising a combination of graphite and compounds of potassium, wherein that combination of graphite and potassium in the core composition does not exceed 5%wt, as claimed in independent Claim 17. In fact, no range of compositions of a combination of graphite and potassium compounds is mentioned in any of the cited patent. Therefore, none of the cited patents, alone or combined, teach or suggest all the limitations of independent Claim 17. The Patent Office has not met its burden of establishing a prima facie case of obviousness with respect to Claim 17.

With regard to some suggestion or motivation to modify the reference or to combine reference teachings, as well as to a reasonable expectation of success, it has been well articulated

re: Marshall; Claire R. (York, PA); Lake; Frank B. (Brodbecks, PA); Bushey; Ruger A. (Litticstown, PA)

Alloy Rods Global, Inc. (Hanover, PA)

To.. 683844

<sup>&</sup>lt;sup>1</sup> MPEP 2142-2143

Serial Number 09/683,584 Filed January 22, 2002 Group Art Unit: 1725

that a factual inquiry whether to combine references must be based on objective evidence of record<sup>2</sup> and that teachings of references can be combined <u>only</u> if there is some suggestion or incentive to do so<sup>3</sup>. Applicant respectfully argues that because all elements of independent Claim 1 or independent Claim 17 are not disclosed or even suggested to in either Church or Marshall or their combination, there can be no objective evidence of record that the two patents can be combined to come up with the claimed invention. Similarly, no reasonable expectation of success of combining the cited patents to come up with the claimed invention could be found in the cited patents, since they don't even disclose all the limitations of the invention claimed in independent Claims 1 and 17. Therefore, the Patent Office has not met its burden to establish a prima facie case of obviousness with regard to independent Claim 1 and 17. Applicant respectfully asks the Patent Office to withdraw the obviousness rejection and allow Claims 1 and 17.

Claims 2-7 depend off allowable Claim 1 and are now allowable. Claims 18-23 depend off allowable Claim 17 and are now allowable. Allowance of Claims 2-7 and 18-23 is respectfully requested.

Claims 8-16 were rejected under 35 USC 103(a) over U.S. Patent No. 4,800,131 to Marshall et al. ("Marshall"). Applicant respectfully asserts that the standard of prima facie case of obviousness was not established by the Patent office with respect to independent Claim 8.

Specifically, Marshall talks about cored wire filler metals. It mentions a potassium titanate compound only once (Col. 2, line 19) throughout the whole patent. It never mentions or suggests that a combination of graphite and compounds of potassium should be used as an arc stabilizer in a straight polarity welding configuration, as claimed in amended independent Claims 8 and 12. Marshall never mentions or suggests any range of percentages of the combination in the core composition, it never mentions anything at all with respect to a percentage of a combination of graphite and compounds of potassium, and logically so, since Marshall never mentions such a combination in the first place, contrary to the elements of amended independent Claims 8 and 12. Therefore, the Patent Office has not met its burden of establishing a prima facie case of obviousness with respect to Claims 8 and 12.

<sup>&</sup>lt;sup>2</sup> In re Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

<sup>&</sup>lt;sup>3</sup> In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Ped. Cir. 1988).

Serial Number 09/683,584 Filed January 22, 2002 Group Art Unit: 1725

Also logically there can be no objective evidence found on the record that the two patents can be combined to come up with the invention claimed in amended Claim 8. Similarly, no reasonable expectation of success of combining the cited patents to come up with the invention claimed in amended Claims 8 and 12 could be found in the cited patents, since they don't even disclose all the limitations of the invention claimed in amended Claims 8 and 12. The Patent Office has not met its burden to establish a prima facie case of obviousness with regard to amended independent Claims 8 and 12. Applicant respectfully asks the Patent Office to withdraw the obviousness rejection and allow Claims 8 and 12.

Claims 9-11 depend off allowable Claim 8 and are now allowable. Allowance of Claims 9-11 is respectfully requested. Claims 13-16 depend off allowable Claim 12 and arc now allowable. Allowance of Claims 13-16 is respectfully requested.

## CONCLUSION -

For the foregoing reasons, Applicant believes this application is in condition for allowance which is respectfully requested. Please contact the undersigned attorney with any questions regarding this application and pending Claims to expedite their allowance.

Dated: June 12, 2003

Respectfully submitted,

Maria Eliseeva, Reg. No. 43,328

Customer No. 29127

Houston Eliseeva LLP

4 Militia Drive, Suite 4

Lexington, MA 02421

Phone: 781-863-9991

781-863-9931

c-mail:maria@patentbar.com